

ABSTRACT OF THE DISCLOSURE

A sensor assembly for monitoring physical parameters in a given environment, such as in a tire or wheel assembly, includes an improved interface between sensor components. The sensor assembly includes a piezoelectric substrate on which 5 resonator elements, such as surface acoustic wave (SAW) resonators are provided. The resonators are configured to produce electrical output at predetermined resonator frequency ranges that can be monitored to determine such information as pressure and temperature to which such devices are subjected. A projection is formed on a surface of the piezoelectric substrate, which selectively interfaces with a 10 recessed surface area in a flexible lid casing component. The lid casing component and a rigid base casing component combine to form an enclosed package for the sensor assembly. An antenna may be coupled to the sensor assembly to facilitate receipt and/or transmission of communicated signals.